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EXAMINER
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CHOI, PETER H

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/915,415

Applicant(s)

SUMITA ET AL.

Examiner

Peter Choi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-18,20-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18,20-32 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. This **FINAL** action is in response to Applicant's amendment filed October 25, 2005.

### ***Response to Amendment***

2. Applicant has canceled claims 1-9, 19 and 33. Applicant has amended claims 10, 13, 14, 20, 21, 22, 24 and 34. Claims 10-18, 20-32, and 34 are pending in the application.
3. The amendment filed October 25, 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: extracting a pair of commodities of which occurrence frequency is above a threshold from pairs of commodities selected (from claim 21).

Applicant is required to cancel the new matter in the reply to this Office Action.

***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Figure 3 lacks shopping cart 51 (described on page 16 of the specification).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. Previous rejections made towards Figures 11, 13 and 21 are withdrawn in view of amendments made to the specification.

***Response to Arguments***

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6. In the previous Office Action, notice was taken by the Examiner that certain subject matter is either old and well known, or inherent in the art. Per MPEP 2144.03(c), these statements are taken as admitted prior art because no traversal of these statements were made in the subsequent response. Specifically, did Applicant did not refute that:

- The step of transmitting a customer's identification and financial information is old and well known in the art
- The step of using a completion code is old and well known in the art
- Interactive promotional material presented to the customer inherently requires the customer to interact and provide input or feedback
- The step of uploading the customer's response and identifying information to a central repository is old and well known in the art
- The step of confirming successful transmissions of data or financial payments is old and well known in the art
- A customer's purchase history contains a list of items purchased, including the identification code (ISBN, SKU numbers, etc.) and the store location where they were purchased
- The step of obtaining feedback from customers regarding their purchases is old and well known in the retail art, where customers are asked questions regarding their satisfaction with product selection, price, availability, and the product itself
- The step of displaying a list and a total price of purchased commodities inputted until then to the customer is an inherent practice in retailing, as point-of-sale

terminals are configured to read and record the SKU number and price of each item scanned in order to create an invoice or receipt for all of the items the customer desires to purchase

- It is inherent that computer memory is configured to store a plurality of information in a plurality of formats (such as links to advertisements, the advertisements themselves, survey questions about a commodity, answers to questions, identification codes, identification information)

7. Applicant's arguments with respect to claims 24 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant argues that a case of prima facie obviousness has not been established at least because the requisite motivation to combine Treyz, Linden and Suzuki is lacking. Applicant further argues that the Office Action did not show any desirability of the combination of the Treyz, Linden and Suzuki references.

The Examiner respectfully disagrees. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, increasing customer loyalty and providing services to increase customer convenience (such as providing a list of recommended sales of items purchased with regularity) which may lead to increased customer retention, are beneficial in the business arts, and thus provides a basis for which to combine references.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 21-32 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 21 and 34 cite an "occurrence frequency" to which a pair of commodities is compared. "Occurrence frequency" is not described in the specification. Furthermore, the methodology of determining said occurrence frequency is unknown.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 10-19, 21, and 23-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the communication unit as claimed is merely configured to send purchase data to a commodity data management apparatus; however, the unit does not actually send the data. Similarly, the display unit is merely configured to display commodity data, the unit does not actually display the data.

Regarding claim 11, the location detection unit as claimed is merely configured to detect a location of the customer; however, the unit does not actually detect the location.

Regarding claim 21, the communication unit as claimed is merely configured to receive purchase commodity data, and the data analysis unit is merely configured to select a pair of commodities; however, the unit does not actually perform these steps.

Regarding claim 23, the memory of the commodity data management apparatus as claimed is merely configured to store the identification code of said apparatus; however, the memory does not actually store this information.



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Use of the word "may" implies that the recited steps are optional, thereby rendering the scopes of claim 10, 11, 21, and 23 indefinite. The Examiner suggests that the Applicant reword the claims to positively recite each step. For example, in claim 10, "a display unit displays the other commodity data to the customer", and in claim 11, "a location detection unit detects a location of the customer associated with inputted purchase commodity data".

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 10-14, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Treyz et al. (U.S Patent #6,587,835).

As per claim 10, Treyz et al. teaches a commodity data input and output apparatus, comprising:

an input unit (**input interface 134**) configured to input (**enter financial information by downloading the information from a person computer or other device, by entering the information using dedicated keys, or by using any other suitable approach**) purchase commodity data (**information on financial transactions**) of a customer in time series (**time and date**) at the time the customer selects (**purchases**) the commodity [Column 16, lines 37-41, Column 18, lines 9-14, and Column 45, line 15];

a communication unit (**handheld computing device 12 in communication with communications network 32 over a wireless or wired communications link 40**) configured to send the purchase commodity data of the customer to a commodity data management apparatus, and to receive other data from the commodity data management apparatus (**handheld computing device 12 may be used to provide the user with an opportunity to send and receive e-mail, telephone calls, voice mail, paging messages, data service feeds, and any other suitable information or messages. Such messages may include text, graphics, audio, and video.**), the purchase commodity data and the other commodity data being a pair of commodities as a tendency of purchase order of commodities of the customer stored in the commodity data management apparatus [Column 11, lines 30-33, Column 16, lines 60-64]; and

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a display unit (**display 118**) configured to display the other commodity data (**advertisement 344, reviews 336, price comparison 342, stock availability 334, warranty information 330, request for brochure 328, customer comments 338, financing information 332, and viewing of video 340**) to the customer [Figure 5, Column 16, lines 17-18].

As per claim 11, Treyz et al. teaches the commodity data input and output apparatus according to claim 10, further comprising:

a location detection unit (**local wireless transmitters and receivers used to detect handheld computing device 12**) configured to detect a location of the customer (**using global positioning system satellites**) associated with inputted purchase commodity data [Column 23, lines 8-22 and 36-68].

As per claim 12, Treyz et al. teaches the commodity data input and output apparatus according to claim 11,

wherein said communication unit sends an identification code (**satellite signals from GPS satellites**) of said commodity data input and output apparatus, and the location data of the customer (**current location information 695**) with the purchase commodity data (**time 696, historical location 698, transaction amount 700**) to said commodity data management apparatus [Figure 72, Column 23, lines 36-38 and Column 46, lines 9-13].

As per claim 13, Treyz et al. teaches the commodity data input and output apparatus according to claim 12,

wherein the other commodity data includes a commodity name **(products may be located by name using option 452)** and location data **(products may be located by location within the mall using option 546)** of the other commodity [Column 37, lines 59-61].

As per claim 14, Treyz et al. teaches the commodity data input and output apparatus according to claim 13,

wherein said display unit draws a point corresponding to the location data onto a store map **(identifying an item of interest using RFID techniques; obtaining mall directory information 434, store and product locator 440)**, and displays the store map with the commodity name **(at step 550, handheld computing device 12 may provide the user with on-screen options that allow the user to search for desired stores and products and services; if the user selects an option such as store and product locator option 330 of Figure 37, handheld computing device 12 may display a screen such as screen 530 of Figure 47)** [Column 34, lines 31-35, Column 38, lines 9-11; Claim 2, and Figures 37, 42, 45, 47].

As per claim 20, Treyz et al. teaches a **handheld computing device 12**, comprising the steps of:

inputting (**entering financial information by downloading the information from a person computer or other device, by entering the information using dedicated keys, or by using any other suitable approach**) purchase commodity data (**information on financial transactions**) of each customer in time series (**time and date**) at the time the customer selects (**purchases**) the commodity [Column 18, lines 9-14, and Column 45, line 15];

sending the purchase commodity data of each customer to a commodity data management apparatus (**using communications network 32 and wireless or wired communications link 40**) [Column 11, lines 30-33];

receiving other data from the commodity data management apparatus (**handheld computing device 12 may be used to provide the user with an opportunity to send and receive e-mail, telephone calls, voice mail, paging messages, data service feeds, and any other suitable information or messages. Such messages may include text, graphics, audio, and video**), the purchase commodity data and the other commodity data being a pair of commodities as a tendency of purchase order of commodities of the customer stored in the commodity data management apparatus [Column 11, lines 30-33, Column 16, lines 60-64]; and

displaying the other commodity data (**advertisement 344, reviews 336, price comparison 342, stock availability 334, warranty information 330, request for brochure 328, customer comments 338, financing information 332, and viewing of video 340**) to the customer [Figure 5, Column 16, lines 17-18].

Although not explicitly taught by Treyz et al., the handheld computing device 12 is a computer usable medium inherently having computer readable program code enabling the device to perform the steps described above, meeting the limitations of the claim.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treyz et al (U.S Patent #6,587,835).

As per claim 15, Treyz et al. teaches the commodity data input and output apparatus according to claim 14,

when said input unit inputs a payment command (**pay now options 626 and 628**) from the customer [Figure 60],

While not specifically taught by Treyz et al., the step of transmitting a customer's identification and financial information is old and well known in the art. It would have

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been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. with the well known step of transmitting identification and financial information of customers to a central repository in order to verify the identity and financial information of customers and to facilitate the completion of the financial transaction (authorizing transfer of funds from the customer's bank account to the store) and thereby providing merchants with the added confidence that the person submitting payment is indeed the person providing payment, providing the merchants with protection against credit fraud and stolen identity.

While not specifically taught by Treyz et al., the step of using a completion code is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the well known step of using completion codes in order to notify users that their payment has been accepted and that the transfer of funds has been authorized, thereby providing customers with the added confidence that the proper amount has been charged to their account and successfully paid for.

As per claim 16, Treyz et al. teaches the commodity data input and output apparatus according to claim 15,

when said communication unit (**handheld computing device 12**) receives a list and a total price of purchased commodities (**history including stores visited, type of**

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**commodity purchased, total price of purchases 700)** from said commodity data management apparatus **(after entered or downloaded by user)**,

wherein said display unit displays the list and the total **(history including stores visited, type of commodity purchased, total price of purchases 700)** to the customer [Figure 72, Column 46, lines 9-23].

As per claim 17, Treyz et al. teaches the commodity data input and output apparatus according to claim 16,

when said communication unit receives a question related to the purchase commodity **(promotional material)** from said commodity data management apparatus,

wherein said display unit displays the question **(promotional material)** to the customer.

As per claim 18, Treyz et al. teaches the commodity data input and output apparatus according to claim 17,

when said unit presents a question **(interactive promotional material)** to the customer [Column 31, lines 48-65],

Although not specifically taught by Treyz et al., the interactive promotional material presented to the customer inherently requires the customer to interact and provide input or feedback. The step of uploading the customer's response and identifying information to a central repository is old and well known in the art. It would



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have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the well known step of sending the answer and corresponding identifying information of customers to a central repository to obtain the benefits of enabling companies to use data mining techniques to conduct market research and customer profiling to obtain a better understanding of customer behavior and interests, and to create more effective and efficient targeted marketing offers, providing the benefit of increasing customer loyalty and sales.

17. Claims 21-25 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treyz et al. (U.S Patent #6,587,835), and further in view of Suzuki (U.S Patent #6,129,274).

As per claim 21, Treyz et al. teaches a handheld computing device 12 configured to:

receive **(entering financial information by downloading the information from a person computer or other device, by entering the information using dedicated keys, or by using any other suitable approach)** purchase commodity data **(information on financial transactions)** of each customer in time series **(time and date)** at the time the customer selects **(purchases)** the commodity [Column 18, lines 9-14, and Column 45, line 15]; and

store the pair of commodities as a tendency of purchase order of commodities of the customer (**shopping lists may be created based on products that are identified**) [Column 2, lines 41-42].

Although not taught by Treyz et al., Suzuki teaches an electronic personal digital shopping assistant that will:

select a pair of commodities (**necessity items**) continually purchased by the customer within a predetermined time period from the purchase commodity data (**last purchase data of necessity items**) [Column 14, lines 4-8], extract a pair of commodities of which occurrence frequency is above a threshold (**a substantial period has past [sic] since the customer last purchased necessity items; analyze last purchase data of a necessity item from the shopping history**) from pairs of commodities selected [Column 14, lines 4-11], and store the pair of commodities (**providing transaction information to the interface unit for writing to the personal memory store; memory store 52 for storing customer demographic information and transaction history data**) [Column 10, lines 20-22]

Suzuki does not explicitly teach the step of storing a pair of commodities as a customer tendency of purchase order of commodities. However, Suzuki maintains lists of replenishment item recommendations that are based on the occurrence frequency of purchasing commodities.

As mentioned above, Treyz et al. teaches a handheld computing device storing customer transaction information to provide shopping assistance services, and Suzuki teaches an analogous system that uses an electronic personal digital shopping assistant to update a user's shopping transaction history and make purchase recommendations for replenishment items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the step of identifying a pair of commodities exceeding an occurrence threshold because the resulting combination would provide personalized item recommendations to the customer based on previous shopping behavior.

As per claim 22, Treyz et al. teaches the commodity data management apparatus according to claim 21, wherein said communication unit receives an identification code **(satellite signals from GPS satellites)** of the commodity data input and output apparatus, an identification code of a commodity **(time 696, historical location 698, transaction amount 700)**, and location data of the customer **(current location information 695)** purchasing the commodity [Figure 72, Column 23, lines 36-38 and Column 46, lines 9-13].

As per claim 23, Treyz et al. teaches the commodity data management apparatus according to claim 22 further comprising:

memory (**random-access memory {RAM} 74, read-only memory {ROM} 76, other memory 78**) configured to correspondingly store information [Figure 4, Column 15, lines 8-10].

While Treyz et al. does not specifically teach what the memory is used to store, it is inherent that computer memory is configured to store a plurality of information in a plurality of formats, meeting the limitations of the claim.

As per claim 24, Suzuki teaches a method of:

selecting a pair of identification codes of purchase commodities (**necessity items**) corresponding to the same identification code of the commodity data input and output apparatus (**customer transaction history information**), of which an interval between two receiving times is below a predetermined period (**last purchase data of necessity items; a substantial period has past [sic] since the customer last purchased necessity items**) from the purchase commodity table (**customer shopping history information**) [Column 14, lines 4-11], and

storing the pair of identification codes of purchase commodities (**items**) in a data analysis result (**memory store 52 for recording and maintaining information relating to a customer's transactional preferences**) table [Figure 5, Column 11, lines 49-53].

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Although Suzuki does not explicitly teach the step of the identification code of the commodity data input and output apparatus, information regarding to customer to which a certain data input and output apparatus is associated to is available, thus the customer's identity serves as the identification code, meeting the limitation of the claim.

As stated above, Treyz et al., and Suzuki are both directed towards the analogous art of using computing devices to store customer transaction information in order to provide shopping assistance services; therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the step of identifying and storing identification codes of purchase commodities whose input times are below a threshold in order to develop effective personalized item recommendations as taught by Suzuki, as the resulting combination yields the benefits of increasing customer loyalty, and conveniently providing customers with a list of recommended sales of items purchased with regularity or items that supplement (are related or coordinate well together with) purchased items.

As per claim 25, Treyz et al. teaches the commodity data management apparatus according to claim 23,

when said communication unit receives the identification code **(satellite signals from GPS satellites)** of the commodity data input and output apparatus [Column 23, lines 36-38],

wherein said data analysis unit extracts a list of purchase commodities corresponding to the identification code of the commodity data input and output apparatus **(transaction history with time 696 and historical location 698 of purchases)** from the purchase commodity table, and calculates the total of the purchase commodities **(transaction amount 700)** [Figure 72]; and

wherein said communication unit sends the list of purchase commodities **(transaction history)** and the total of the purchase commodities **(transaction amount 700)** to said commodity data input and output apparatus [Figure 72].

Treyz et al. does not expressly teach a completion code as recited in the claim; however, this difference is only found in the non-functional descriptive material and is not functionally involved in the steps recited nor does it alter the recited structural elements. The recited method steps would be performed the same regardless of the completion code. Further, the structural elements remain the same regardless of the completion code. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP § 2106.

It is an old and well-known concept in the art to confirm successful transmissions of data or financial payments. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the well

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known concept of a completion code to be used to communicate confirmation of successfully completing financial transactions, inputting data, verifying user identities, and submitting a list of purchased items, thereby providing merchants with the added confidence that the person submitting payment is indeed the person providing payment, protecting the merchants against cases of credit fraud and stolen identity, and providing customers with the added confidence that the proper amount has been charged to their account and successfully paid for.

As per claim 34, Treyz et al. teaches a computer program product for use with a computer (**handheld computing device 12**), comprising the steps of:

receiving (**having users enter financial information by downloading the information from a person computer or other device, by entering the information using dedicated keys, or by using any other suitable approach**) purchase commodity data (**information on financial transactions**) of each customer in time series (**time and date**) at the time the customer selects (**purchases**) the commodity [Column 18, lines 9-14, and Column 45, line 15], and

store the pair of commodities as a tendency of purchase order of commodities of the customer (**shopping lists may be created based on products that are identified**) [Column 2, lines 41-42].

Although not explicitly taught by Treyz et al., the handheld computing device 12 is a computer usable medium inherently having computer readable program code

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enabling the device to perform the steps described above, meeting the limitations of the claim.

Although not taught by Treyz et al., Suzuki teaches an electronic personal digital shopping assistant that will:

select a pair of commodities (**necessity items**) continually purchased by the customer within a predetermined time period from the purchase commodity data (**last purchase data of necessity items**) [Column 14, lines 4-8];

extract a pair of commodities of which occurrence frequency is above a threshold (**a substantial period has past [sic] since the customer last purchased necessity items; analyze last purchase data of a necessity item from the shopping history**) from pairs of commodities selected [Column 14, lines 4-11]; and

store the pair of commodities (**providing transaction information to the interface unit for writing to the personal memory store; memory store 52 for storing customer demographic information and transaction history data**) [Column 10, lines 20-22]

Suzuki does not explicitly teach the step of storing a pair of commodities as a customer tendency of purchase order of commodities. However, Suzuki maintains lists of replenishment item recommendations that are based on the occurrence frequency of purchasing commodities.



As mentioned above, Treyz et al. teaches a handheld computing device storing customer transaction information to provide shopping assistance services, and Suzuki teaches an analogous system that uses an electronic personal digital shopping assistant to update a user's shopping transaction history and make purchase recommendations for replenishment items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Treyz et al. to include the step of identifying a pair of commodities exceeding an occurrence threshold because the resulting combination would provide personalized item recommendations to the customer based on previous shopping behavior.

18. Claims 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Treyz et al. (U.S Patent #6,587,835) and Suzuki (U.S Patent #6,129,274) as applied to claim 24 above, and further in view of Linden et al. (U.S Patent #6,266,649).

As per claim 26, although not taught by Treyz et al., Linden et al. teaches the commodity data management apparatus according to claim 24, when said communication unit newly receives an identification code of purchase commodity **(after the customer places item in shopping cart)**,

wherein said data analysis unit decides whether the identification code of purchase commodity matches one of the pair of identification codes of purchase commodities **(filtering the similar items list to remove any items that exist in the**

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**shopping cart or have been purchased by the user)** in the purchase commodity table. [Column 16, lines 36-38].

Treyz et al., Suzuki and Linden et al. are all directed towards the analogous art of using a computing device to store customer transaction information to provide shopping assistance services. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined teachings of Treyz et al. and Suzuki to include the step of comparing commodities of interest to other commodities, as taught by Linden et al., in order to conveniently identify commodities that are similar, cheaper, substitutable (alternative), and related (commodities that are commonly purchased in conjunction with the commodity {for example, peanut butter and jelly, toothpaste and toothbrush, etc.}) to the commodities already known to be of interest to the user, thereby providing personalized item recommendations to the customer based on previous shopping behavior.

As per claim 27, Treyz et al. teaches the commodity data management apparatus according to claim 26, that contains memory (**random-access memory {RAM} 74, read-only memory {ROM} 76, other memory 78**) and displays advertisements (**advertisements, promotional information, and videos**) of commodities to the customer [Figure 4, Column 15, lines 8-10, Column 27, lines 27-28, and Column 31, lines 20-30 and 48-65].

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While Treyz et al. does not specifically teach what the memory is used to store, it is inherent that computer memory is configured to store a plurality of information in a plurality of formats (links to advertisements or the advertisements themselves), meeting the limitations of the claim.

As per claim 28, Treyz et al. teaches the commodity data management apparatus according to claim 27,

if the identification code (**bar code or RFID information**) of purchase commodity matches one of the pair of identification codes of purchase commodities,

wherein said communication unit sends the advertisement (**advertisements, promotional information, and videos**) corresponding to the other of the pair of identification codes and the commodity name (**bar code or RFID information**) to the commodity data input and output apparatus (**handheld computing device 12**) [Column 27, lines 20-30, and Column 31, lines 20-30 and 48-65].

As per claim 29, Treyz et al. teaches the commodity data management apparatus according to claim 26, wherein said memory previously stores location data (**historical location 698 and current location 695**) corresponding to the identification code of each commodity [Figure 72, Column 45, line 65 – Column 46, line 23].

As per claim 30, Treyz et al. teaches the commodity data management apparatus according to claim 29,

if the identification code (**bar code or RFID information**) of purchase commodity matches one of the pair of identification codes of purchase commodities,

wherein said communication unit sends the location data (**information on an item in a store or other facility**) corresponding to the other of the pair of identification codes and the commodity name to the commodity data in put and output apparatus (**handheld computing device 12**) [Column 27, lines 55-62].

As per claim 31, Treyz et al. teaches the commodity data management apparatus according to claim 26,

wherein said communication unit sends a question (**interactive promotional material**) corresponding to the identification code of purchase commodity (**bar code or RFID information**) received to the commodity data in put and output apparatus.

Treyz et al. teaches memory (**random-access memory {RAM} 74, read-only memory {ROM} 76, other memory 78**) configured to correspondingly store information [Figure 4, Column 15, lines 8-10]. While Treyz et al. does not specifically teach what the memory is used to store, it is inherent that computer memory is configured to store a plurality of information in a plurality of formats (questions about a commodity), meeting the limitations of the claim.

As per claim 32, Treyz et al. teaches the commodity data management apparatus according to claim 31,

when said communication unit receives an answer (**input**) for the question (**interactive promotional material**) from the commodity data input and output apparatus.

Treyz et al. also teaches memory (**random-access memory {RAM} 74, read-only memory {ROM} 76, other memory 78**) configured to correspondingly store information [Figure 4, Column 15, lines 8-10]. While Treyz et al. does not specifically teach what the memory is used to store, it is inherent that computer memory is configured to store a plurality of information (answers to questions, identification code, identification information) in a plurality of formats, meeting the limitations of the claim.

Treyz et al. does not explicitly teach that an answer is received from the user; however, the presentation of interactive promotional material [Column 31, lines 48-65] inherently requires the user to interact and provide input or feedback, meeting the limitation of the claim.

### ***Conclusion***

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Choi whose telephone number is (571) 272 6971. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PC

Peter Choi  
Examiner  
Art Unit 3623

January 9, 2006

*Susanna M. Diaz*  
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